

Dreaming in Vienna: Analyzing dreams of Arthur Schnitzler and Sigmund Freud

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Summary. The goal of the present study was to analyze the dreams of Arthur Schnitzler and explore the dream content for potential parallels or differences to what is known about his private life in order to test the continuity hypothesis of dreaming. In addition, Freud's dream content was also analyzed in order to compare Freud's and Schnitzler's dreams. One hundred dream reports from Schnitzler and 34 dreams from Freud were coded using the Hall and Van de Castle rating system. Schnitzler reported more familiar characters, more friends and more family characters as well as a lower male percent compared to the male norms. In addition, Schnitzler showed less aggression in his dreams and an equal amount of friendly interaction with male and female dream characters. Compared to Freud, Schnitzler showed more familiar characters and a lower bodily misfortunes percent in his dreams. These differences can in part be explained by the continuity hypothesis. Future research could analyze dream diaries of other writers from different time periods or persons with different occupations.

Keywords: Dreams, continuity hypothesis, Arthur Schnitzler, Sigmund Freud

1. Introduction

1.1. General remarks

Writers, musicians, and painters but also scientists, architects, and film makers have used dreams as a source of inspiration (Barrett, 2001): For example, Albrecht Dürer painted an image from his dream as did William Blake. Paul McCartney, Beethoven, and Richard Wagner heard the sound for their musical compositions in their dreams. Authors like Mary Wollstonecraft who wrote "Frankenstein", Stephen King, Edgar Allan Poe, or Charlotte Bronte were inspired by their dreams to write one or several of their novels. Therefore, it could be potentially interesting to closer examine dream content of authors and how they incorporated dreams into their works.

In a study of Hall and Domhoff (1968) dreams from Freud and Jung were analyzed with the coding system of Hall and Van de Castle (1966) and several differences between the two men and the male norms (500 dreams of 100 American male students) were found. For example, Freud dreamed more about friends and acquaintances than Jung. Moreover, Freud had more aggression towards women than men and more friendly interaction with men than women, which is a reversed pattern compared to the male norms. Freud also had more success than failure and in his dreams misfortune happened more often to other dream characters

than himself (Hall & Domhoff, 1968). The authors interpreted this pattern as indicative of Freud's and Jung's personalities and their waking life experiences. For example, Freud is described as a social person with many close friends, whereas Jung is described as more solitary, explaining the differences in familiar dream characters between the two men. Moreover, Hall and Domhoff (1968) see Freud's hostility towards women in his dreams as an inverted Oedipus complex (sexual desire for the same-sex parent and hatred of the opposite-sex parent). In addition, Freud's dreams included more success than Jung's reports which could be in accordance with Freud's goals and achievements in real life, whereas Jung did not put as much effort into success and fame as Freud did.

Arthur Schnitzler was an Austrian author who lived at the same time as Freud. He was very much interested in dreams and recorded many of his own dreams during his life (Schnitzler, 2012). He was also an acquaintance of Freud who described Schnitzler as his "Doppelgänger" in one of his letters to him. Therefore it could be potentially interesting to compare Schnitzler's and Freud's dreams since they share some similarities, for example living in the same time and place, both being Jewish but not practitioners of religion, both having studied medicine, and sharing an interest in dreams and dream interpretation.

1.2. Biography of Arthur Schnitzler

Arthur Schnitzler was a Jewish Austrian author and dramatist who was born and lived in Vienna in the years from 1862 to 1931. The following paragraphs follow the biography of Fliedl (2005). The peak of his literary career was before the World War I. During his life in Austria he earned much praise but also much criticism for his work and had to endure the rising anti-Semitic atmosphere in Europe before his death in 1931. Born in Vienna as the first child of his parents he already discovered his preference for poetry and literature

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Submitted for publication: April 2017

Accepted for publication: September 2017

and his dislike for science as a study subject during his youth. However, since his father was a famous physician in Vienna and wanted him to pursue a medical career, Arthur studied medicine and worked as a doctor at first. He had always felt like he was competing with his father and later with his younger brother Julius who became a doctor as well, and his younger sister Gisela's husband who was also a doctor (Fliedl, 2005). Even though Schnitzler started to publish his own work early on in 1880, it was only after his father's death in 1893 that Arthur started to seriously pursue a career as a writer. In his life he published multiple novels and theater plays that earned him praise and criticism as well. His novella "Fräulein Else" was even adapted into a movie during his lifetime in 1929.

Schnitzler had multiple close friends and colleagues who also had careers in the theater and publishing business, for example Otto Brahm, Richard Beer-Hofmann, Hugo von Hofmannsthal, and Hermann Bahr (Fliedl, 2005). He was also an acquaintance of Sigmund Freud after they first met in 1922 (Le Rider, 2008). Starting in his early years, he had several relationships with women like Franziska Reich, Marie Glümer, or Marie Reinhard (Fliedl, 2005). Kandel (2012) wrote that Schnitzler had "multiple sexual experiences". In 1902 he had a son, Heinrich Schnitzler, with his lover Olga Gussmann, even though they were not married at the time. They married in the year of 1903 and had a second daughter named Lili Schnitzler in 1909. Even though Schnitzler was something of a "womanizer" in his youth, Fliedl (2005) writes that Schnitzler became a "responsible family father" after their marriage which was divorced in 1921. Schnitzler's daughter Lili committed suicide in 1928, which was a tragic loss for Schnitzler. 3 years later in October 1931 Schnitzler died presumably of a brain stroke (Fliedl, 2005).

Freud described Schnitzler as a determined and skeptical person in one of his letters, whose character people would mistake for pessimism (Scheible, 2000). Moreover, Freud wrote about Schnitzler that he was moved by the truth of the unconsciousness and adhering to the polarity of love and death, which in turn evoked a feeling of familiarity in Freud. Schnitzler was known as a critic of social rules and conventions of his time, for example the role of women in society and the "laziness" of doctors to advance the sciences (Perlmann, 1987).

1.3. Relationship of Arthur Schnitzler with Freud

Overall, Sigmund Freud wrote ten letters to Schnitzler (Le Rider, 2008). In his third letter (in celebration of Schnitzler's 60th birthday) Freud admitted that he had avoided Schnitzler because Schnitzler reminded Freud of himself (Kandel, 2012; Le Rider, 2008; Scheible, 2000). He saw Schnitzler as something like his "Doppelgänger", describing Schnitzler as a "psychoanalytical scientist" who had gained knowledge similar to Freud through intuition and understanding of himself. In his letter Freud described how he admired Schnitzler, flattering him. At this time Schnitzler was already a famous author and Freud was likely trying to gain him as an ally for his psychoanalytical movement (Le Rider, 2008; Scheible, 2000). Overall, Schnitzler was an admirer of Freud and held personal sympathies towards him, as did Freud towards Schnitzler.

1.4. Arthur Schnitzler's attitude towards psychoanalysis

Schnitzler was interested in dreams and had written down many of his own dreams during his life (Schnitzler, 2012). He had also read a lot of Freud's publications and was interested but also critical of his theories (Le Rider, 2008). The interest in Schnitzler originated mainly from Freud and his colleagues who had also read Schnitzler's work and in turn mentioned him in their publications. Schnitzler was especially critical of the theory about the unconscious and the rigidity of its representatives about it. In his opinion psychoanalysts made use of the unconsciousness as an explanation way too often when it was not necessary to do so. He also recognized their tendency to take any critique and refusals as proof for their theories and criticized their attempt to describe dream symbols and the Oedipus complex as overall phenomena that applied to every person. Schnitzler accepted the psychoanalytical interpretations of his written characters but he disliked the attempts to transfer the results on the author, himself. Other authors of this time period, for example Robert Musil, did not accept psychoanalytical interpretations of written characters as easily as Schnitzler and offered tough criticism of attempts to do so (Le Rider, 2008). However, even though he was interested in psychoanalytical interpretations, Schnitzler was also a strict critic of psychoanalytical theories.

1.5. Dreams in the work of Arthur Schnitzler

Schnitzler incorporated the subject of dreams into a lot of his written work, for example in "Frühlingsnacht im Sezieraal", "Alkandis Lied", "Die Weissagung", "Die Nächste", "Frau Berta Garlan", "Der Schleier der Beatrice", and "Fräulein Else" (Perlmann, 1987).

One of his most popular works is his novella "Dream Story" (in German "Traumnovelle") from 1925 which was also adapted into the film "Eyes Wide Shut" by director Stanley Kubrick with actors Tom Cruise and Nicole Kidman in 1999. In the fifth chapter the female character Albertine tells her husband Fridolin a dream she had in which she cheated on him with a male dream character whereas Fridolin was faithful to her in the dream and as a consequence got tortured and crucified. Fridolin is shocked by her dream report and takes the dream content literally as if she had cheated on him in real life. At the end of the novella, the married couple decides to stay together though and both are glad that they "survived" their adventures in both dreaming and waking life (Perlmann, 1987).

Authors like Günther Mahal and William Rey described Schnitzler's novella as a fictional prime example of Freud's dream theory about unconscious urges manifesting in dreams (Perlmann, 1987), even though in Schnitzler's work Fridolin does not interpret the dream of his wife in a psychoanalytical way but takes it at face value, blaming her for her infidelity in her dream. Moreover, there are parallels between Schnitzler's own dreams and the dreams in his works: For example, in one of his own dreams his wife Olga is taken to her execution while Schnitzler himself does not care about this in his dream. The dream shows similarities to the dream that Albertine reports in Schnitzler's novella in which her husband is also taken to his execution while she does not seem to care about his approaching doom (Perlmann, 1987). The novella is particularly famous for its blurred lines between dream and reality and the question which parts of

the work take place either in a dream or in reality (Le Rider, 2008; Perlmann, 1987).

1.6. Present study

The goal of the present study was to analyze the dreams of Arthur Schnitzler and explore the dream content for potential parallels or differences to what is known about his private life in order to test the continuity hypothesis of dreaming (Hall & Nordby, 1972). The selection of Arthur Schnitzler was based on practical considerations: First, he kept a dream diary and many dreams sufficient for dream content analysis have been published (Schnitzler, 2012). Second, as he has been a famous author sufficient details of his life have been published (Fliedl, 2005). In addition, Freud's dream content was also analyzed in order to compare Freud's and Schnitzler's dreams to each other and examine potential similarities and differences between the two men.

Based on the continuity hypothesis (Schredl, 2003), one could expect similarities between the waking life and dream content of both men: since both Schnitzler and Freud are described as very sociable men who had many friends and maintained much contact with their colleagues, one hypothesis is that both men should report a higher number of total dream characters compared to the male norms. There should also be a higher number of familiar characters and more friendly interaction than aggression in dream content. Furthermore, as Schnitzler is a writer his dreams should be longer than Freud's dream reports. Lastly, Schnitzler had more sexual interactions with the opposite sex in his younger years than Freud had so one would expect that Schnitzler experienced a higher number of female dream characters and additionally showed more friendly interactions with women in his dreams than Freud.

2. Method

2.1. Dream reports

For the present study, 100 dream reports from Arthur Schnitzler from the years of 1875 to 1915 were taken from (Schnitzler, 2012). Schnitzler's dreams have a mean dream length of 111.75 words ($SD = 98.83$, $min = 50$, $max = 878$). Compared to the male norms this difference has a small effect size of $d = 0.09$. Thirty-four dreams from Freud were used for the present analysis (Freud, 1900, 1971) with a mean dream length of 102.03 words ($SD = 99.54$, $min = 12$, $max = 400$). The difference between the male norm group and Freud's dream length has an effect size of $d = 0.22$.

The male norms consisted of 100 male American students between the ages of 18 and 25 who reported 500 diary dreams during the 1940s and 1950s (Hall & Van de Castle, 1966) with a mean dream length of 118.64 words ($SD = 44.13$, $min = 36$, $max = 370$; $N = 491$).

2.2. Dream content analysis

The dream content analysis was coded according to the rules given by Hall and Van de Castle (1966). Dreams were scored for characters, aggression, friendliness, sexuality, settings, objects, success and failure, misfortune and good fortune, and emotions. The exact coding rules for each topic are found in Hall and Van de Castle (1966) and Domhoff (1996), the following is a short summary of these coding rules. Characters are scored for number, gender, identity,

and age. For instance an individual female stranger adult is scored with the code 1FSA and a group of male adult friends would be coded with 2MKA. Aggressive interactions are scored for aggressor and victim, and for intensity on an 8-point nominal scale (ranging from 1 = aggressive thoughts to 8 = murder). Friendly interactions are scored similar to aggression but on a 7-point subscale (ranging from 1 = friendly feelings to 7 = the desire for a long-term relationship) and sexuality on a 5-point scale (ranging from 1 = sexual thoughts to 5 = sexual intercourse). Settings are scored for location (outdoors or indoors) and for familiarity. Success, failure, and good fortune are not coded on a nominal scale whereas misfortune is coded on a 6-point subscale (ranging from 1 = encountering an obstacle to 6 = dying as a result of accident or illness). Emotions are classified into the five subclasses anger, apprehension, sadness, confusion, and happiness. Finally, objects are coded with multiple categories and subclasses like architecture, household, food, implements, travel, streets, regions, nature, body parts, clothing, communication, money, and a miscellaneous category. Striving is defined as the sum of successes and failures.

The percentage of male dream characters ("male percent") is obtained by dividing the number of male characters by the sum of male and female dream characters. The percentage of familiar dream characters (familiarity percent) is obtained by dividing the number of familiar characters (family and known characters including friends, acquaintances and prominent characters) through the total number of dream characters. The same method is applied to friends percent, family percent, dead and imaginary percent, and animal percent. Aggression/Friendliness percent is computed by dividing all aggressive interactions through the sum of aggressive and friendly interactions. Befriender percent is defined as friendly interactions initiated by the dreamer divided by all friendly interactions. The same principle is applied to the aggressor percent which is defined as aggressive interactions initiated by the dreamer divided through all aggressive interactions. Physical aggression percent is all physical aggression divided by all aggressive interactions.

The A/C index is computed by dividing the total of aggressive interactions by the total number of characters in the dreams. The same is performed to obtain the F/C index for friendly interactions and the S/C index for sexual interactions respectively. Indoor setting percent is obtained by dividing all indoor settings through the total of settings of all dreams. The same is done for the familiar settings to obtain the familiar setting percent.

Self-negativity percent is defined as the amount of negativity (aggression directed at the dreamer, failures, misfortunes) divided by the sum of the amount of negativity plus the amount of positivity (friendliness directed at the dreamer, success, good fortune). The bodily misfortunes percent is computed by dividing the total of M5 and M6 misfortunes by all misfortunes. The M5 score for misfortunes is defined as "a character is injured or ill. This class includes pain, operations, any bodily or mental defects, insanity, amnesia, blindness". The M6 score is defined as "a character is dead or dies as a result of accident or illness or some unknown cause". The negative emotions percent is defined as all negative emotions divided by all emotions. Dreamer-involved successes percent is computed by dividing all dreamer-involved successes through the sum of dreamer-involved successes and dreamer-involved failures. To ob-

Table 1. Dream content for dreams from Schnitzler and Freud compared to male norms

	Schnitzler (N = 100)	Schnitzler h-statistics	Freud (N = 34)	Freud h-statistics	Male Norms (N = 500)
Characters					
Male Percent	59%	-.16**	68%	.01	67%
Familiarity Percent	59%	.27**	42%	-.06	45%
Friends Percent	38%	.14*	29%	-.04	31%
Family Percent	17%	.15**	10%	-.05	12%
Dead & Imaginary Percent	1%	.12*	3%	.20	0%
Animal Percent	1%	-.28**	3%	-.18	6%
Social Interaction Percents					
Aggression/Friendliness Percent	34%	-.50**	38%	-.41	59%
Befriender Percent	50%	-.00	29%	-.45	50%
Aggressor Percent	41%	.03	40%	.01	40%
Physical Aggression Percent	38%	-.23	0%	-1.57**	50%
Social Interaction Ratios					
A/C Index	.06	-.66	.08	-.63	.34
F/C Index	.09	-.29	.10	-.26	.21
S/C Index	.02	-.10	.01	-.12	.06
Settings					
Indoor Setting Percent	49%	.02	55%	.13	48%
Familiar Setting Percent	43%	-.38**	28%	-.69**	62%
Self-Concept Percents					
Self-Negativity Percent	59%	-.12	40%	-.50	65%
Bodily Misfortunes Percent	25%	-.10	80%	1.07*	29%
Negative Emotions Percent	74%	-.16	80%	-.01	80%
Dreamer-Involved Success Percent	60%	.18	50%	-.02	51%
Torso/Anatomy Percent	9%	-.56**	27%	-.09	31%
Topics per Dream					
Aggression	19%	-.61**	18%	-.64**	47%
Friendliness	30%	-.17	21%	-.39*	38%
Sexuality	7%	-.16	3%	-.35*	12%
Misfortune	26%	-.22*	12%	-.59**	36%
Good Fortune	8%	.08	6%	-.00	6%
Success	3%	-.45**	6%	-.31	15%
Failure	6%	-.31**	6%	-.32	15%
Striving	9%	-.48**	12%	-.39*	27%

*p<.05, **p<.01

tain the torso/anatomy percent the sum of the mentions of the torso, anatomical parts, and sexual organs are divided by the total number of all body parts mentioned (Domhoff, 1996).

2.3. Procedure

The first 100 dreams from Arthur Schnitzler (Schnitzler, 2012) were scored according to the method of Hall and Van

de Castle (1966). In Schnitzler's case, dreams that had a word count below 50 words were excluded. 100 dreams are approximately one quarter of all dreams of Schnitzler collected in (Schnitzler, 2012). Thirty-four dreams from Freud published in "Die Traumdeutung" (Freud, 1900) and in "Über Träume und Traumdeutungen" (Freud, 1971) were scored with the same method but also including dreams with a word count below 50 words since Freud did not report as many dreams as Schnitzler.

Table 2. A/C and F/C indices for male and female dream characters for Schnitzler and Freud compared to male norms

	Schnitzler	Freud	Male norms
A/C index with males	.05	.05	.28
A/C index with females	.02	.14	.17
F/C index with males	.09	.14	.17
F/C index with females	.08	.10	.29

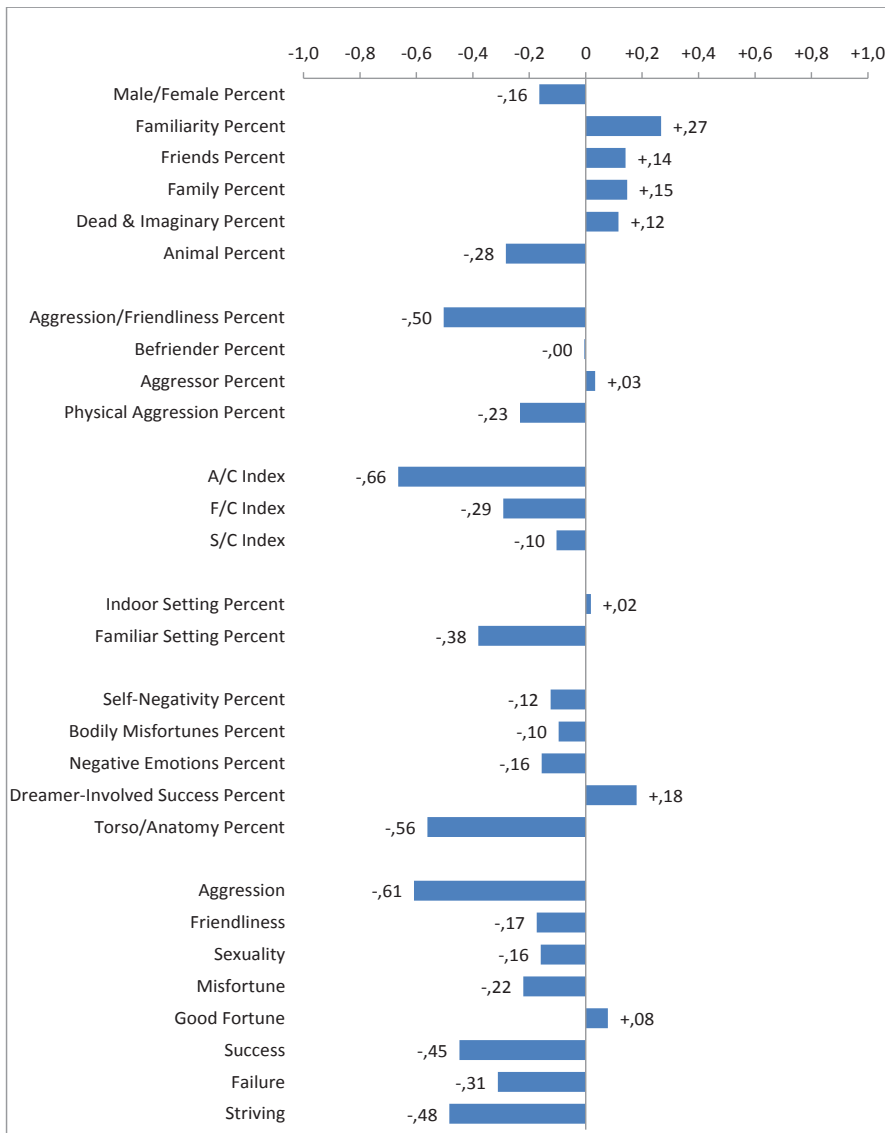
which provide an automatic analysis after entering the coding of each dream (Domhoff & Schneider, 1998; Schneider & Domhoff, 2017). The program computed h statistics on the basis of the total percentages of the dream content and the male norms found in Domhoff (1996). Nine written dream reports of the norms were lost, however, and therefore the mean dream length and the mean of total dream characters were computed based on the remaining 491 dream reports. To compare Freud and Schnitzler, a third DreamSAT Excel sheet from dreamsearch.net was used that was programmed to compare two or more dreams series.

After computing the h effects sizes for the difference between the male percentages of the two samples, the h effect size can be tested for significant differences using the z statistic (Domhoff, 1996). The SAT Excel sheets do not provide significance levels for the A/C, F/C, S/C indexes because the statistical testing of the h statistic only works for values between 0 and 1 (Schneider & Domhoff, 2017).

2.4. Statistical procedures

The codings of each dream were entered into two separate DreamSAT Excel sheets available on dreamsearch.net

Figure 1. Schnitzler h-profile vs. male norms (differences as effect sizes)



3. Results

Results for the dream content analysis for Schnitzler's and Freud's dreams compared to the male norm group are presented in Table 1, including the h statistics.

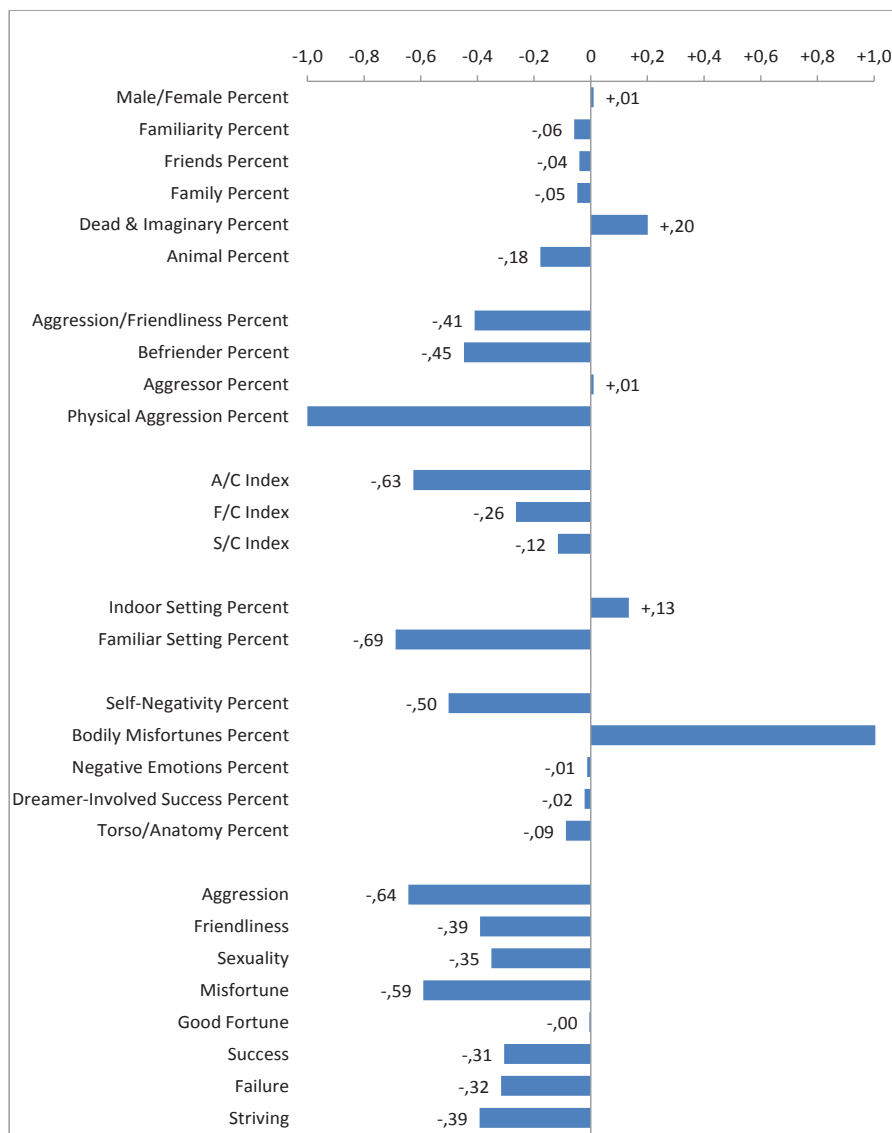
Schnitzler reported a mean of 4.44 dream characters (SD = 2.68, min = 0, max = 16) per dream and the male norms a mean of 2.36 characters per dream (SD = 1.51, min = 0, max = 10) (Hall & Van de Castle, 1966). The effect size for the difference of dream characters between Schnitzler and the male norms is large (d = 0.96). Schnitzler had a significantly lower male/female percent than the male norm group (see Figure 1). In addition, Schnitzler reported more familiar dream characters, a higher percent of friends and family characters in his dreams, and a higher percent of dead and imaginary characters. In addition, Schnitzler had a lower animal percent than the male norms. Schnitzler reported less aggression than the norms, therefore receiving a lower aggression/friendliness percent and a lower A/C index. Moreover, Schnitzler showed a lower familiar setting percent than male norms. In his dreams he reported less anatomy objects than is the norm. In addition, Schnitzler re-

ported less misfortune in his dreams and showed less success but also less failure in his dreams, resulting in a lower striving percent.

Freud reported a mean of 2.35 dream characters (SD = 1.95, min = 0, max = 7) per dream, compared to the male norm sample which reported a mean of 2.36 dream characters per dream (SD = 1.51, min = 0, max = 10). The effect size for the difference of dream characters between Freud and the male norms is small (d = 0.01). Freud reported significantly less aggression and no physical aggression at all in his 34 dreams (Table 1). He also showed a lower familiar setting percent, whereas he showed a higher bodily misfortunes percent than the norm sample (see Figure 2). Moreover, Freud reported less friendliness and less sexuality in his dreams. Lastly, Freud had less misfortune in his dreams and a lower striving percent than male norms.

Comparing Schnitzler and Freud, both men reported an equal dream length (d = 0.10), however, Schnitzler reported more dream characters per dream (d = 0.89). Moreover, Schnitzler dreamed more about familiar dream characters than Freud did and reported more physical aggression in his

Figure 2. Freud h-profile vs. male norms (differences as effect sizes)



dreams but less bodily misfortunes than Freud (see Figure 3). Additionally, Freud reported a higher torso/anatomy percent than Schnitzler.

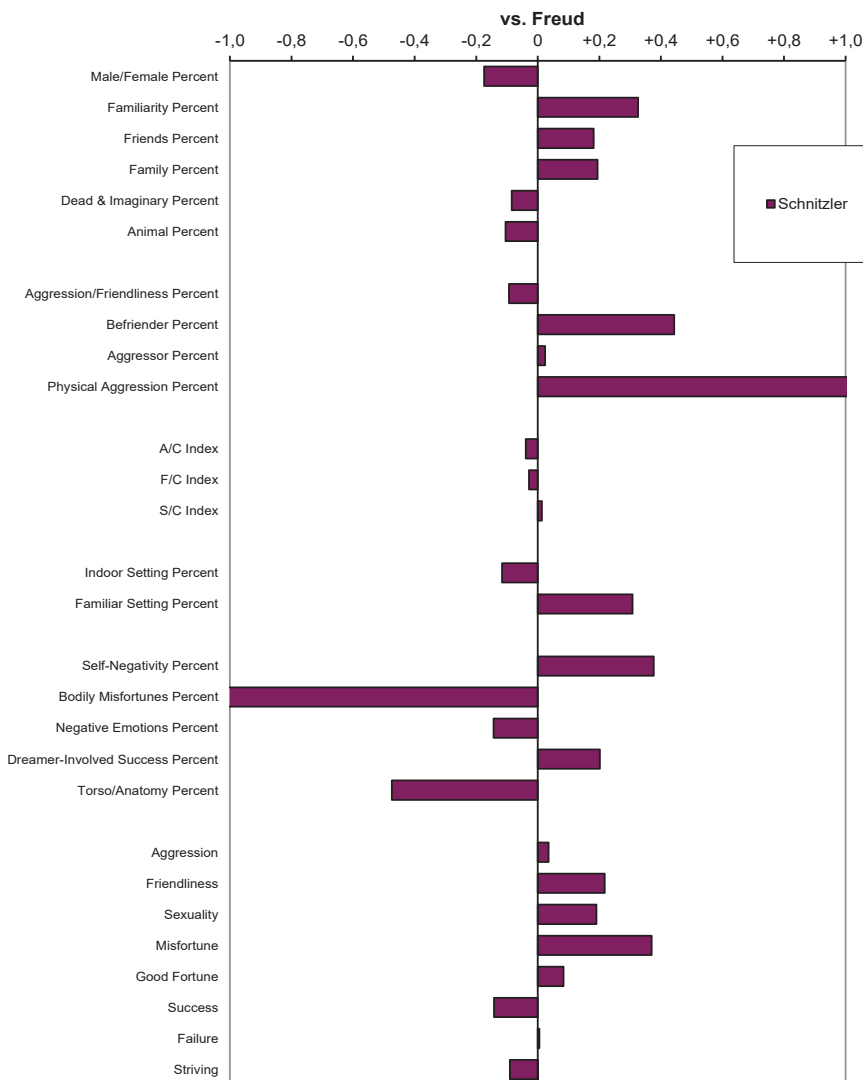
A/C and F/C indices for female and male dream characters in Schnitzler's and Freud's dreams compared to male norms are presented in Table 2. Male norms reported more friendliness towards women than men and more aggression towards men than women. For Freud, this pattern is reversed, showing more friendly interactions with males than females and more aggression with females than males. However, all of his A/C and F/C indices were still lower than the male norms, for example, even though Freud reported more aggression with female than male dream characters, his A/C index for female characters was still below the male norm. All of Schnitzler's A/C and F/C indices were below the male norms as well. He reported the typical pattern of showing more aggression with males than females, however, his F/C indices for males and females were almost the same, indicating that Schnitzler reported an equal amount of friendliness with male and female dream characters.

4. Discussion

Overall, the findings of the present study indicate that there are significant differences between the dreams of Schnitzler and the male norm sample that are in line with the continuity hypothesis (Schredl, 2003): Schnitzler reported a lower male percent and a higher amount of familiar characters in his dreams. In addition, Schnitzler showed an equal amount of friendly interactions with male and female dream characters. Moreover, Schnitzler showed less aggression and less failure but also less success and less striving in his dreams than the male norms. The main differences found between Schnitzler and Freud show less aggression but more bodily misfortunes in Freud's dreams, whereas Schnitzler showed a higher familiarity percent than Freud.

Some methodological considerations have to be addressed. Firstly, only 34 dreams of Freud were available for the analysis, much less dreams as have been available from Schnitzler. Moreover, one can assume that Freud censored his own dreams and only published certain dreams or only parts of his dreams that were useful in supporting his theories and did not reflect badly on Freud himself. In contrast,

Figure 3. H Profile of Freud vs. Schnitzler (Freud = baseline) (differences as effect sizes)



Schnitzler did not make his dreams available to the public during his lifetime. His dream reports written in his diaries were only published years after his death. It is possible Schnitzler only wrote down dreams that had a certain emotional meaning to him. Nonetheless his dream reports are presumably less censored than Freud's. This was the main reason to select Arthur Schnitzler for the present study, i.e., obtaining a sufficient large dream sample that is not biased by considerations regarding publication of the dreams and theoretical considerations. The close relationship between dream content and Schnitzler's waking life support the authenticity of the dreams. As there is only a small sample of dreams available from Freud they might not be representative of his dream life in general. Secondly, the male norms consisted only of young American college students who provided diary dreams that were collected anonymously in the 1940s and 1950s. It should also be considered that the male norms were obtained in a different time period than the times of Freud and Schnitzler. Presumably different social norms and living conditions can lead to different dream content when waking life experiences are incorporated in dreams as described by the continuity hypothesis (Schredl, 2003). In addition, norms should be available for a wider age range so dreams can be compared between people of the same age group. There were some differences between the Freud findings of the present study and the findings of Hall and Domhoff (1968). These differences might be due to different raters coding the dreams of Freud presumably on different dimensions. Moreover, the sample sizes were slightly different (28 dreams vs. 34 dreams) which possibly changed the h profile of Freud.

Schnitzler reported a higher number of dream characters per dream than the male norm sample. Moreover, Schnitzler had a lower male percent and dreams more about friends and family characters. In addition, Schnitzler reported more aggression with male dream characters which is in accordance to the male norms, however, Schnitzler showed an equal amount of friendliness with male and female dream characters, whereas the male norms showed a higher amount of friendliness with female characters. Those findings are in accordance to what is known about his private life: Schnitzler had many male and female friends, had several close relationships with women, and often dreamed about his wife Olga, his children, and his siblings (Fliedl, 2005; Schnitzler, 2012). This is supported by the continuity hypothesis (Schredl, 2003) and a study of König, Mathes, and Schredl (2016) who found that the number of real life friends correlated positively with the number of dream characters. Schnitzler's higher dead and imaginary character percent can be explained by the appearance of friends (who had died in reality) in his dreams, and his lover Marie Reinhard who died in 1899 but continued to appear in his dreams (Fliedl, 2005; Schnitzler, 2012). Moreover, Schnitzler reported a lower familiar setting percent which can be explained by the fact that he used to travel a lot to Germany, Sweden, Norway, and Denmark, and moved at least 3 times in his lifetime (Fliedl, 2005). In addition, Schnitzler reported less aggression in his dreams which may be explained by his higher age compared to the male norms – as aggression in dreams decreases with age (Hall & Domhoff, 1963). Moreover, Schnitzler showed less misfortune and failure but also less success and striving in his dreams. A possible explanation for this difference is that the male student sample's dreams were obtained in a life period of higher stress filled

with studying and exams. Lastly, Schnitzler showed a lower torso/anatomy percent, which is surprising considering that Schnitzler had studied medicine and worked as a doctor before he became a professional writer. It is possible that as a writer Schnitzler was more focused on the plot and emotional development of his characters than their physical appearance.

Freud reported a similar amount of dream characters per dream compared to the male norms. In accordance with the findings of Hall and Domhoff (1968) the present study found that Freud reported more friendly interactions with men and more aggressive interactions with women. Hall and Domhoff (1968) argue that Freud had an inverted Oedipus complex (in psychoanalysis the sexual desire for the same-sex parent and hatred of the opposite-sex parent). Regardless of psychoanalytical terms, it is known that Freud preferred the presence of his male students to female company and sometimes exhibited unfavorable views of women (Jones, 1953). Moreover, Freud reported less aggression in general compared to the male norms and no physical aggression in his 34 dreams which can be explained by his higher age than the norm sample – as aggression in dreams decreases with age (Hall & Domhoff, 1963). Furthermore, Freud only published certain dreams during his lifetime and one can assume that he preferably published dreams that were favorable to him. Freud showed less friendly interactions and less sexuality in his dreams which can also be attributed to his particular selection of dreams and possibly his concerns about people analyzing him unfavorably. In addition, Freud reported more bodily misfortunes which can again be explained by his publishing dreams that were in accordance with his theories. Like Schnitzler, Freud reported a lower familiar setting percent that can also be explained by Freud moving at least 4 times in his lifetime and traveling a lot in Germany, Italy, the USA, and France (Jones, 1953). In contrast to the findings of Hall and Domhoff (1968) the present study found that Freud reported a lower striving percent than the male norms but also a lower amount of misfortunes which can be explained (in a similar fashion to Schnitzler) by the more stressful life period of the student sample with periods of studying and exams. The present study did not find that Freud reported more success than failure; instead we found an equal amount of success and failure, which is a similar pattern to the male norm sample that also showed an equal amount of success and failure.

There are also several differences between the dream reports of Schnitzler and Freud. Even though Freud's and Schnitzler's dreams have a similar word count, Schnitzler reported more dream characters per dream and more familiar dream characters than Freud. Both Freud and Schnitzler were known to be quite sociable people, having many friends and acquaintances. Nonetheless, Schnitzler still reported more dream characters than Freud which could indicate that Schnitzler was simply more sociable compared to Freud. Moreover, both men reported less aggression than the male norms and Freud reported even less physical aggression than Schnitzler, implying that Freud reported only verbal aggression in his dreams and, in addition, Freud reported a higher percent of bodily misfortunes than Schnitzler and a higher torso/anatomy percent which could be due to Freud publishing only selected dreams.

To summarize, the present study found that Schnitzler reported more familiar characters, more friends and more family characters as well as a lower male percent compared

to the male norm. Moreover, Schnitzler showed less aggression in his dreams and an equal F/C index for male and female dream characters. Lastly, Schnitzler reported less misfortune and failure but also less success and striving in his dreams than the male norm group. Compared to Freud, Schnitzler showed more familiar characters and a lower bodily misfortunes percent. These differences can in part be explained by the continuity hypothesis (Schredl, 2003) since some results are in accordance with what is known about the waking lives of both men. Future research could analyze dream diaries of other writers from different time periods and compared those findings with the results regarding Schnitzler or persons with other occupations. In addition, research would greatly profit from updated norm samples for gender and age norms for the content analysis method of Hall and Van de Castle (1966).

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